DETERMINANTS OF INSURANCE COMPANIES' PROFITABILITY IN UAE

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Abstract

The insurance sector plays an important role in the service-based economy of UAE, and its services are now being integrated into the wider financial services industry. This study investigated the determinants of the profitability in insurance companies in UAE. Specifically, the study examines the effects of the independent variables (age of company, company size, volume of capital, leverage ratio and loss ratio) on profitability proxied by ROA. A key indicator of insurance companies profitability in this study is the return on assets (ROA), defined as the before-tax profits (BTP) divided by total assets (TA). This study uses a sample from the UAE insurance companies' annual reports during the period (2004-2007) to investigate the determinants of profitability. The finding from this study shows that there is no relationship between profitability and age of company, and, there is significantly positive association between size and profitability. The result also shows that the volume of capital was positively related to the profitability, this relationship is also significant. Consistent with what have been hypothesized the study suggests an opposite and significant relationship between leverage ratio and loss ratio as independent variables and profitability.

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LIST OF ABBREVIATIONS

AED	Arab Emirate Derham
AIG	Arab Insurance Growth
BTP	Before –Tax Profit
CAGR	Compound Annual Growth Rate
EIS	Enterprise Investment Scheme
GCC	Gulf Cooperation Council
GDP	The Nominal Gross Domestic
GMM	Generalized Method of Moments
LEV	Leverage Ratio
LOS	Loss Ratio
NIM	Non Interest Margin
NYS	New York State Insurance Department
OLS	Ordinary Least Square Regression
ROA	Return on Assts
ROE	Return on Equity
ROI	Return on Investment
ROIC	Return on Invested Capital
RONA	Return on Net Assets
TA	Total Assets
UAE	The United Arab Emirates
VOC	Volume of Capital
WACC	Weighted Average Cost of Capital

CHAPTER ONE

BACKGROUND OF STUDY

1.0 Introduction

This chapter starts with UAE economic in section one, followed by an overview of insurance sector in some Arab countries. The Problem Statement section comes next, followed by the research objectives and research questions. Subsequently, the sixth section lays down the significance of the study, followed by the organization of the thesis report in the final section.

1.1 UAE Economic Overview

UAE is the second largest economy after Saudi Arabia in the GCC and one of the most open and integrated economies in the region. Dubai, Abu Dhabi, Ajman, Fujairah, Ras al-Khaimah, Sharjah and Umm al-Quwain are the seven emirates that collectively form the UAE.

"The economic development in the United Arab Emirates can be divided into three eras: before 1962 oil exports, after the union establishment and oil prices boost of 1973, and late nineties up to current days. In the first period, all the revenues were coming from pearl production, herding, agriculture and fishing. However, the second period was dominated by oil industry especially after the rise of oil prices in 1973. But this didn't persist for a long time, and some other factors played a vital rule in pushing forward the country's economy growth. Since 1973, the UAE has undergone a profound transformation from an impoverished region of small desert principalities to a modern state with a high standard of living. In recent years, the UAE has undertaken several projects to diversify its economy and to reduce its dependence on oil and natural gas revenues. But it's still expected that oil and gas reserves should last for over 100 years, at the current production rates." (Judi, 2007).

IMF Country Report (2006) stressed that economic growth has been impressive, reflecting sharply higher oil prices, increased oil production, strong investor confidence, and a significant increase in foreign direct investment. Preliminary data for 2005 indicate that real nonhydrocarbon GDP grew at 11 percent, while the hydrocarbon sector registered a growth rate of 2.1 percent. Growth was broad-based with most sub-sectors growing at historically high rates, especially in manufacturing, real estate and construction, and trade. However, inflation has been on the rise, driven by the strength of domestic demand, a hike in gasoline prices and a significant increase in the prices of non-tradables such as rents and services. Both

the external current account and overall consolidated fiscal balances are estimated to have recorded large surpluses in 2005 (14.7 percent and 26.9 percent of GDP, respectively). The nonhydrocarbon deficit (excluding investment income) narrowed by 1.7 percentage points of GDP, to 17.3 percent. The broad money stock rose by 34 percent, mainly on account of a rapid increase in private sector credit.

According to Annual Social and Economic Report United Arab Emirates UAE's growth momentum continued in 2007 with the economy posting its fifth consecutive year of strong economic growth and is expected to show healthy growth in 2008 as well on the back of high oil prices and strong regional liquidity and the brisk infrastructural and construction developments that are underway currently. During 2007, the economy grew at a healthy pace with the nominal Gross Domestic Product (GDP) estimated to have grown by 16.5% in 2007 to reach AED698.1bn (US$190.1bn) while real GDP is expected to have grown by 7.4% to reach AED420.2bn (US$114.4bn) in 2007. Real economic growth, which excludes the direct impact of changes in oil prices, has grown at a CAGR of 9.3% per annum in the last five years and is among the fastest rates in the world. Construction, real estate, banking and tourism have been the main drivers underpinning the real GDP growth.

Table 1.1

Productive sectors (services)

Sectors	2006	2007	Annual Growth Rate
Wholesale and Retail Trade	58.8	66	12.2
Restaurants and Hotels	11.5	13.4	16.5
Transport and Communication	39.5	43.9	11.1
Real Estate	47.2	55.8	18.2
Leisure and Social services	10.2	11.5	
Financial Establishments	48.8	55.8	14.3
Banking Services	(11.1)	(12.4)	
Government Services	46.4	55.4	19.4
Domestic Services of Households	3	3.6	20
Total	254.3	293	15.2

Source: Ministry of Economy, Central Statistical Department (2007)

*(AED billion)

Productive service sectors achieved a total output figure of AED 293 billion (about 40.2% of GDP). Data indicates that the Real Estate sector achieved a growth rate of 18.2% in 2007. This indicator is evident if one considers the increasing number of residential units over the last few years (597 thousand units in 2005, 616 thousand in 2006, and 637 thousand units in 2007).

The domestic trade sector reached a growth rate of 12.2% in 2007. This is considered an effective sector in economic development as it witnesses great developments in markets to meet the demands of high living standard residents as well as meeting the work requirements and needs of the capital and intermediate goods.

1.2 Overview of Arab Insurance Market

There is little information on the Arab insurance market due to the developing natures of their economies.

"As a market Insurance premiums in the Middle East are about US$5.3 billion last year - that's less than 1% of the global total, but it's up 12% on the year before and growth is expected to continue in the near future: some predict that Middle East insurance premiums will hit US$44 billion by 2010. Growing populations and incomes, more stringent and sophisticated regulation, increasing public awareness, and more and more insurance products geared specifically to Muslim customers, are all expected to help propel the industry forward during the coming decade."

The potential growth in the insurance sector is also illustrating the premiums per capital income of in Arab companies relatively to other market in the world.

"Insurance premiums in the UAE averaged US$310 per person in 2003, US$149 per person in Kuwait and just US$41 per person in Saudi Arabia. That's a fraction of the premiums paid by policyholders in Taiwan, who shelled out an average of US$1,433 in insurance premiums last year, and in Singapore, where the per capita average was US$1,620 - not to mention the premiums earned in highly developed insurance markets, such as the UK, where the average person paid more than US$4,000 in premiums 2007." (arabicinsurance.com)

Experts believe that life insurers in the region should remain optimistic, in part because of the usual dynamics of increasing affluence. Swiss Re noted in a recent study that the "demand for insurance to cover the risks of old age and death increases in tandem with rising per-capita income," and the Middle East, particularly the Gulf countries, have witnessed strong economic growth during the past few years: from 1998 to 2002, for example, the UAE saw GDP per capita rise almost 60%; Kuwait, 37%; Oman, about 34%; Bahrain, 26%; and Saudi Arabia, 8%.

The local life insurance industries have risen in parallel in some of these markets. In Kuwait, for example, life insurance premiums more than doubled from 1998 to 2002; in the UAE, premiums rose 45% during that same time period; and in Bahrain they went up 28%. However, in Saudi Arabia and Oman, life premiums declined, 4% and 6%, respectively.

According to El-Quqa, Dash, Sarma, Hasan and Mohamed (2007)in the UAE, where life premiums total led US$226 million last year, insurance companies see much room for growth and are designing products to try to capture the market. The big insurers are stepping in to help fill that gap: Zurich International Life, one of the UAE's biggest life insurers, recently launched a product here geared specifically towards high-income expatriates. Some regional players are also making moves in

the same direction. In October, Oman Insurance Company, another major local player, launched a new capital-guaranteed savings product in cooperation with Société Générale and said it would also offer it in other markets in the region.

Rettab and Bakheet (2005) the Arab Insurance Market review, an annual study published by Bahrain-based Arab Insurance Group (AIG), noted in its most recent report that GDP in the Middle East and North Africa is expected to grow by an average of 3.6% annually until 2010, while the population in the region is estimated to reach 330 million during the next six years, from 282 million last year.

There is huge potential in Saudi Arabia which currently has the lowest insurance penetration of any market in the world, at just 0.5% of GDP. The world average is 3.8%, while its GCC neighbours have penetration rates that are more than double Saudi's: 1.1% in the UAE, for example, and 1.2% in Oman. The average spending per person on insurance in Saudi Arabia last year was just US$41.20 - Premiums per person in Lithuania and Argentina, which have a GDP per capita close to Saudi Arabia's, were almost twice that level.

General insurance accounted for 96% of insurance spending in Saudi Arabia last year, whereas the average spent on life insurance was a measly US$1.70 per person. This breakdown between general and life insurance is particularly dramatic in Saudi Arabia, but it reflects the larger situation in the region, where general insurance massively overshadows the life market. General insurance premiums in the five GCC countries for which 2003 data is available total led US$2.2 billion; life insurance premiums were only US$416 million (arabicinsurance.com).

1.3 Problem Statement

According to Ngoyen (2006) profitability is one of the most important objectives of financial management because one goal of financial management is to maximize the owner's wealth, and, profitability is very important determinants of performance.

At the present, the UAE is the biggest insurance market in the GCC, with US$971 million in premiums 2007. But countries such as Singapore and Taiwan, which have a GDP per capita at about the same level as the UAE, enjoy much higher insurance premium levels - US$9 billion and US$32 billion, respectively. With an insurance penetration rate of just 1.1% of GDP, the Emirates still have a long way to go to catch up with Singapore's 7.6% and Taiwan's 11.3% penetration (http://www.itp.net.)

The annual reports of the insurance companies in the UAE for the years 2006/2007 show a large fluctuation in the profits of most companies during this period. More specifically by focusing on some companies, the following are noted:

1-Increased profits, of Dubai Islamic Insurance to 41.6 AED million in 2007 compared with year-end losses had been achieved by the company during the year 2006, represently an increase of 404%.

2- Increased profit of Alsagr insurance company to 19.9 AED million in the end of 2007 compared with a profit of $ 11.7 AED million during the same period in 2006, represently an increase of 925%.

3- Increased profits, Dubai Insurance Company to 44.1 AED million in 2007 compared to year-end loss of $ 23.3 AED million end of the year 2006, represently an increase of 289%.

4- Some companies experienced unexpected losses during the year 2007, compared with profits realized during the year 2006, these companies are Arab insurance group and Salama insurance company.

The variation of profit among insurance companies in the region suggests that internal factors or firm-specific factors play a crucial role in influencing insurance companies' profitability. It is therefore imperative to identify what are these factors as it can help insurance companies to take action that will increase their profitability and investors to forecast the profitability of insurance companies in UAE.

Review of literature shows that these studies focused on the determinants of profitability, but most of these studies are conducted on the banking sectors, both commercial and, Islamic. However there are few studies that have been conducted on the insurance sector. One such is study to measure profitability in the life insurance companies in the United Kingdom and another study is a study to identify the factors that determine the profitability of the auto insurance departments in United States.

Only a smaller group of studies that have examined insurance companies profitability in developing countries such as Jordan, hence there is a need for such studies in insurance sector in developing countries. In addition to, this sector is very new in UAE, and most of the insurance companies are small compared with insurance companies in United Kingdom and the United States of America.

In addition, the absence of studies that assist in identification the factors that have led to such loss to deal with such disorders for the purpose of avoiding such losses.

1.4 Research Objectives

This study aims to:

1) Identify the factors that affect profitability in insurance companies in UAE.
2) Rank these factors according to their degree of influence on insurance companies' profitability.

3) Determine the relationship between these factors and profitability in insurance companies.

1.5 Research Questions

1) Is there any relationship between the age of the company and profitability of insurance companies in UAE?
2) Does increase of the capital has positive impact on expansion of the activities of the insurance companies in UAE?
3) Is there any relationship between firm size and profitability of insurance companies in UAE?
4) What is the impact of leverage on the profitability of insurance companies in UAE?
5) What is the impact of loss ratio on profitability in the insurance companies in UAE?

1.6 The significance of study

The main reason for this study is that researchers have not paid enough attention to this subject in the Arab World in general, and in UAE in particular. Most of studies in this area have focused on the forensic side of the insurance companies as well as methods to predict rates of loss, and did not focus on the factors that affect the profitability in these companies like any other financial institutions.

This study is expected to provide empirical evidence on the profit performance of insurance companies in UAE.

This study sheds light on the scarcity of this type of studies in UAE. In addition many parties benefit from the results that will emerge from this study, and these parties are:

Management: Administration interested in identifying indicators of success and failure to take the necessary actions to improve the performance of the company and choose the right decisions.

Government: Government interested in knowing which companies operate successfully or failed to take the necessary measures to avoid crises of the bankruptcy in these companies.

Investors: Investors interested in this kind of studies in order to protect their investments, and directing it to the best investment.

Customers: Customers interested in knowing the ability of insurance companies to pay their obligations based on the indicators about success of these companies.

1.7 Organization of the report

The reminder of this thesis is organized as follows: Chapter two presents the previous studies by looking at profitability, the factors that determine it in the insurance companies in particular and other financial institutions in general. Chapter three discusses Methodology and hypotheses development. Chapter four shows analysis, finding and results which are presented and the conclusion are allocated in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter discusses the concept of profitability and previous studies on factors that effect profitability in insurance companies and other financial institutions. The review is divided into four sections. The first section discusses the concept of profitability, previous studies on profitability in insurance companies and on profitability in other financial institutions. The second section presents past researches on the factors that effect on the profitability. Summary of empirical literature will be in third section.

2.1 Profitability

2.1.1 The Concept of Profitability

According to investopedia.com, profitability ratio is a class of financial metrics that are used to assess a business's ability to generate earnings as compared to its expenses and other relevant costs incurred during a specific period of time.

Nancy and Tang (2003), emphasize that the key indicator of firms' profitability is the return on assets (ROA), defined as the before-tax profits (BTP) divided by total assets (TA).

According to Nguyen (2006), there are many different ways to measure profitability, which are Return on Assets (ROA), Return on Equity (ROE) and Return on Invested Capital (ROIC).

(a) Return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage. Sometimes it is referred to as "return on investment".

(b) Return on Equity (ROE) measures a corporation's profitability that reveals how much profit a company generates with the money shareholders have invested.

(c) Return on Invested Capital (ROIC) is a calculation used to assess a company's efficiency at allocating the capital under its control to profitable investments. The return on invested capital measure gives a sense of how well a company is using its money to generate returns. Comparing a company's ROIC

with its cost of capital (WACC) reveals whether invested capital was used effectively.

2.1.2 Previous researches on profitability of insurance companies

According to Wright (1992), due to the unique accounting system used by life insurance companies, profitability of the industry has always been difficult to measure as compared with other financial institutions or corporations. For insurers, profitability is affected by a host of factors including actual mortality experience, investment earnings, capital gains or losses, the scale of policyholder dividends, and federal and state taxes.

One crude measure that may be used to measure trends in profitability is the ratio of capital and surplus to total assets. If this ratio declines over time, profitability must be on the decline and vice-versa

Kashish and Kasharma (1998) used profitability as a dependent variable in a study on insurance companies in Jordan, where profitability was proxied by return on investment (ROI) by using this equation ROA= net profit/total asset.

Kasturi (2006) argued that the performance of insurance company in financial terms is normally expressed in net premium earned, profitability from underwriting activities, annual turnover, return on investment, return on equity. These measures

can be classified as profit performance measures and investment performance measures.

2.1.3 Previous researches on profitability of other financial institutions

Burns (1985) and Meric (1997) measured profitability by using three ratios which namely ROA, RONA and ROE. According to Burns (1987), return on total assets is the best measure of a firm's efficient use of assets in determines the profitability of small companies in the UK because it is independent of financing methods. On the other hand ROE is a better measure of the profit return to shareholders.

Jaggi, Bikki, et al. (1990), examines whether the financial characteristics of owner controlled acquired firms differ from those of the non-owner controlled acquired firms. In this study they used return on assets ratio to measure the profitability.

Bashir (2000) studied fourteen Islamic banks from Bahrain, Egypt, Jordan, Kuwait, Qatar, Sudan, Turkey, and United Arab Emirates between 1993 and 1998. Non Interest Margin (NIM), Before Tax Profit (BTP), Return on Assets (ROA), and Return on Equity (ROE) were used as performance indicators.

Tang (2003) emphasizes that the key indicator of firms' profitability is the return on assets (ROA), defined as the before-tax profits (BTP) divided by total assets (TA).

Williams (2003) considers the determinants of the performance of foreign banks in Australia for the period 1989-93. ROA was used as the dependent variable, which is the proxy of performance.

Kalhoefer and Salem (2008) examined the non performing loans and the profitability of the Egyptian banking sector, especially income related problems in public banks. The profit measure used to analyze this is a bank specific version of the DuPont ROE scheme as suggested by Schierenbeck. Compared to other approaches, it provides a well-organized insight in to the profitability structure of a bank, using the published data from the financial statement.

Lim (2008), analyzes the efficiency and profitability of Japanese banks from 2000-06.The data, which are presented in terms of core profit, average return on assets (ROA), return on equity (ROE), and net interest margin, indicate the low level of profitability of Japanese banks.

2.2 Literature review on the determinants of profitability

2.2.1 Age and Size of company

Several studies have been conducted to examine the effect of size and age on firms profitability, however the result are inconsistence.

Glancey (1998) posted arguments on the relationship between company characteristics including size, age, location and industry group, and profitability and growth. He argued that a firm size measured based on employment is more appropriate than one based on sales or assets which previous studies have used. Firm characteristics are found to be of limited value in explaining profitability. However, in his study larger firms are found to grow faster than smaller, and younger firms are found to grow faster than older. According to him there are also some evidences that growth is stronger in urban than in suburban or rural locations. It is possible that entrepreneurial motivations are an important factor in this regard possible that and it is suggested that future econometric studies of small firm performance take these into account.

Kashish and Kasharma (1998) found that there is positive and significant relationship between the age of company and the profitability measured as return on assets in 1994s but this relation was very weak in 1995s. However, Basarir (2002) found that there was a negative relationship between age and profit orientation.

In the same direction for Reinikka and Svensson, development Research Group by The World Bank (1999) found no significant statistical relationship between size and profit for Ugandan manufacturing firms.

According to the study by Vijayakumar and Kadirvelu (2004), age of the firm is an important determinant of profitability. The older the firm, the more may be the

profitability of the firm, because experience and efficiency in the production process may decrease costs of production. They expect positive relationship between age and profitability of the firm. They found that age is the strongest determinant of profitability.

Kolawole (2006) examined the determinants of profit efficiency among the small scale paddy rice farmers in Nigeria, using stochastic Cobb-Douglas profit frontier model. The estimated parameters of the Cobb-Douglas profit frontier indicate that all the inputs have positive sign on the profitability of rice farming in Nigeria. The results also showed their profit efficiency where positively influenced by age, educational level, farming experiences and household size. These findings have important policy implications in improving production efficiency among farmers in Nigeria.

Hrechaniuk, Lutz and Talavera (2007) expect the firm size (asset size) and the ratio of investments to assets to be endogenous since they would be in turn determined also by the profitability and the revenue/asset ratio, so OLS estimators are biased. Therefore, they employ the heteroskedastic-efficient two-step GMM estimator with instrumental variables1, where the first and second lags of firm-specific variables are employed as instruments.

Li (2007) thus posits that the benefit (cost) of larger firm size, such as scale economies (control-loss feature of hierarchical organization) would be dominant;

hence, firm size has a positive (negative) effect on firm profitability. Moreover, in firms at moderate quantiles, 0.25, 0.5 and 0.75., or in firms at a mature stage, the benefit derived from large firm size would be entirely offset by cost; thus, the coefficient for firm size variable is insignificant.

Ville and Merrett (2007) used Australian time series and cross-sectional data at the firm level for the first half of the twentieth century to address these questions. They compare the return on equity for the largest 20 companies in a database with the remaining 405 firms for the period 1901-21, and then calculate the comparative attrition rates over the following forty years. The top 20 firms as a whole were more profitable, though with somewhat mixed individual performances, and had lower attrition rates over the following 40 years than smaller firms. Thus, larger firms, on average, performed better and were more effective at sustaining their relative standing.

Kosmidou, Tanna, Pasiouras (2007) found a significant inverse relationship between bank size and profitability, suggesting that larger banks tend to earn lower margins and profits. This is consistent with prior evidence suggesting either economies of scale/scope for smaller banks or diseconomies for larger banks.

Bohdana Hrechaniuk (2007) found that the impact of insurer's size is also important for the Spanish insurer's real profitability and Ukrainian insurer's revenue performance. What is more, in Ukraine it influences performance positively in

contrast to the influence in Spain. The inverse relationship between size and profitability in Spain may be explained by high administrative expenses that usually bear huge companies.

Cowling, Bates, Jagger and Murray (2008) note that both age and size had positive and significant effects for Enterprise Investment Scheme recipients: the older and larger the EIS company, the higher its level of fixed asset formation. For Venture Capital Trusts, they observe no relationship with company age, but they find a positive association with company size; one that is greater than for EIS.

2.2.2 Volume of Capital

Buser, Chen and Kane (1981) have examined the theoretical relationship between bank profitability and bank capitalization. These authors find that banks generally have an interior optimal capitalization ratio in the presence of deposit insurance. Generally, banks with a high franchise value - reflecting costly bank entry - have incentives to remain well-capitalized and to engage in prudent lending behavior.

Berger (1995) provides empirical evidence that for U.S. banks there is a positive relationship between bank profitability and capitalization. The author notes that well-capitalized firms face lower expected bankruptcy costs for themselves and their customers, thereby reducing their cost of funding.

According to Walton (2000) the methodology used in calculating international rates of return is well accepted. Data used are generally based on national accounts' data. Annual rates of return are calculated as the ratio of the operating surplus to capital employed. According to this study the growth in capital in most countries has not been as strong in the 1990s, as it was in the 1980s. With profits continuing to be generated, this could indicate that companies are able to generate greater profitability from a given level of capital, than previously.

Hutchison and Cox (2006) examined the relationship between the return on equity and financial leverage in the U.S. banking industry. For the periods 1983-1989 and 1996-2002 they found that there is a negative relationship between bank capital and equity profitability except for the best performing banks.

2.2.3 Leverage (LEV)

"In recent years, a number of theories have been proposed to explain the variation in debt ratios across firms. The theories suggest that firms select capital structures depending on attributes that determine the various costs and benefits associated with debt and equity financing. Empirical work in this area has lagged behind the theoretical research, perhaps because the relevant firm attributes are expressed in terms of fairly abstract concepts that are not directly observable." Titman and Wessels (1988)

Hurdle (1974) emphasizes that a firm with high leverage ratio represents greater financial risk than a firm with relatively less risk. If competition equalizes earnings, then high debt should result in higher return on net worth.

Bothwell, Cooley and Hall (1984) argued that firms have low debt because they operate in industries with high degree of business risk and thus expect a negative relation between leverage and profitability.

Vijayakumar and Kadirvelu (2004), argued that the firm with high leverage ratio represents greater financial risk than a firm with relatively less risk. If competition equalises earnings, then high debt should result in higher return on net worth. It is argued that firms have low debt because they operate in industries with high degree of business risk and thus expect a negative relation between leverage and profitability. However, the co-efficient of Leverage did not support their hypothesis; rather it appears with opposite sign.

According to Harrington (2005), the relationship between leverage and profitability has been studied extensively in support for theories of capital structure. Recent attention has been given to the influence of competitive environment on capital structure choice.

Panayiotis , Athanasoglou and Delis (2008) argue that banks with lower leverage (higher equity) will generally report higher ROA, but lower ROE. Since an analysis

of ROE disregards the risks associated with high leverage and financial leverage is often determined by regulation, ROA emerges as the key ratio for the evaluation of bank profitability.

2.2.4 Loss Ratio

Loss ratio is the ratio of the annual claims paid by an insurance company to the premiums received. Insurers will establish premium rates based upon an anticipated loss ratio that supports claim payments, administrative costs, profit requirements and an appropriate risk margin for adverse experience (freedictionary.com).

NYS Insurance Department (2005) simplified the definition of loss ratio as the percentage of total premium dollars that is paid for claims on a particular type of long term care coverage.

According to a study conducted in Thailand, it is found that for non-life insurance, important factors that affect ROA are technical efficiency, size of capital fund, loss ratio, and market power. Firms that have higher solvency and are more technically efficient are more likely to be profitable, while reducing loss ratios can have a positive impact on profitability. Greater market power, surprising does not increase profitability. (Financial Services Liberalization, Final Report February 28, 2006).

According to Desheng, Yang, and Lianga (2007) the most common ratios used to evaluate operating or underwriting performance are the loss ratio and the expenses ratio.

Hrechaniuk, Lutz and Talavera (2007) in their study has used financial data for the samples of Spanish, Lithuanian and Ukrainian insurance companies that operated on the national markets in different years. Loss ratio is represented by the ratio of incurred claims to premiums earned. The theoretical model predicts that this factor inversely influences insurer's performance as the higher level of incurred losses is expressed in the lower level of performance. This study investigates the determinants of the insurance companies' performance. The results show that loss ratio positively influences corporate revenue performance in Lithuania and negatively influences real profitability in Ukraine. The estimated coefficient for loss ratio for Ukrainian insurers supports the hypothesis in this study about inverse relationship between loss ratio and firm's profitability and is statistically significant.

2.3 Summary of Empirical Literature

Table 2.1 summarizes the empirical studies reviewed in the last section.

Table 2.1:

Summary of previous studies examining

Profitability in insurance companies and other institutions

Year of study	Author(s)	Country	Variables Examined	Findings
2006	Ito& Fukao	China	sales and local Procurements, level o f GDP, per capita GDP. And profitabi-lity.	Local procurement and sales exp ansion contribute to higher profit ability in China.
1998	Kashish and Kasharma	Jordon	Advertisement expenses, Company age, Company size, debt ratio, and profitability.	1) There is positive relationship between advertisement expenses, company age, company size and profitability measured by ROI 2) There is a positive relationship between debt ratio and profitability in profit company and negative for looser company
2000	Bashir	Bahrain, Kuwait, Qatar, U.A.E, E gypt, Jor dan, and Turkey, and Sudan)	Bank characteristics a nd the overall financi al environment, macroeconomic envir onment, financial mar ket structure, taxation , and performance of Islamic banks.	1) Islamic banks profitability measures respond positively to the increases in capital and loan ratios. 2) The results also indicate the importance of customer and short-term funding, non-interest earning assets, and overhead in promoting Banks' profits.

2004	Vijayaku and Kadirvelu	India	Profitability, Growth Rate of Assets (GRA) ,Leverage (LEV), Current Ratio (CR), Inventory Turnover Ratio (ITR),operating Expenses to Sales Ratio ,and Age.	1) Age is found to be the strongest determinant of profitability followed by operati ng expenses to sales ratio, levera ge, fixed assets turnover Ratio, inventory turnover ratio, size, current ratio, growth rate and vertical integration. 2) Size, operating expenses to sales ratio and fixed assets turnover ratio have negative contribution in variation of profit in this industry. 3) Other variables have positive contribution in variation of profit rate. 4) Current ratio is found to be insignificant.
2007	Hrechaniuk , Lutz, and Talavera	Spain, U kraine an d Lithuan ia.	Firm size, loss ratio, capital structure (leve rage), Investment rati o, past performance a nd growth of written premiums: and performance.	There are country differences in the strength of influence of the s ame financial activities in the countries with different institutional and political enviro nment.
2006	Nguyen	Vietnam,	financial managemen t and characteristics, liquidity, leverage, ac tivity and profitability ,	Profitability was found to be related to financial management practices and financial characteri stics. With the exception of debt ratios, all other variables includi ng current ratio, total asset turno ver, working capital managemen t and short-term planning practices, fixed asset manageme nt and long-term planning practices, and financial and accounting information systems were found to be significantly related to SME profitability.

2003	Agarwal Erramilli, and Dev	USA	Market orientation and performance	Market orientation is positively associated with both judgmental measures of performance service quality customer satisfaction and employee satisfaction and objective measures of performance occupancy rate, gross operating profit, and market share.
2004	Hron and Azmi	Various countries	*independent variables a- internal -liquidity, capital structure, deposits structure, assets structure and expenditure item. b- external -market share , money supply, interest rate, inflation and size *dependent variable The profitability	1- Liquidity has a significant positive relationship with profitability. 2- A significant relationship was also found between capital structure and profitability. 3- The results for external variables .mktsh and logsize were found not to have any significant relationship with profitability

CHAPTER THREE

DATA AND METHODOLOGY

3.0 Introduction

This chapter provides a detail steps and procedures used to conduct the analysis of UAE insurance companies' profitability. This incorporates conceptual framework, data collection, sample selection, data analysis, measurement of variables and expected relations.

3.1 Conceptual Framework

The conceptual framework is developed to explain the determinants of profitability. Based on review of literature it is hypothesized that age of company, Volume of Capital, company size, leverage ratio and loss ratio will influence the profitability of insurance companies.

Three key measures of a firm's performance are its profitability, size and survivorship (Cassis & Brautaset, 2003). Profitability indicates the rate of return achieved on a company's assets and investment funds. A firm's ability to expand in size can be a reflection of its success as earnings are reinvested and external funding can be easily attracted. Survivorship shows an ability to develop sustainable

competitive advantages beyond initial opportunities such as an economic upturn or the early growth stages of an industry.

The following hypotheses will be tested:

H 1: There is a positive relationship between age and company profits in the insurance companies in UAE.

Kashish and Kasharma (1998) found that there is a positive relationship between the age of insurance companies and the profitability measured as return on assets in 1994. But this relation was very weak in 1995. This relationship is examined by this study based on the above hypothesis.

H 2: There is a positive relationship between the firm size and profitability of insurance companies in UAE.

A consistent finding is that there is a strong positive relationship between firm size and profitability. Narver and Slater (1990) argue that it is more difficult for smaller firms to get profit than for bigger ones as less capital intensive firms are less flexible and, therefore, operate with more constraints, therefore, this relationship is examined by this study based on the above hypothesis.

H 3: Any increase in the volume of capital has positively affected the expansion of activities of insurance companies in UAE.

The profitable strategy for any firm seems to be to shrink the proportion of equity capital over time (Muherjee and Ghosh 2003). Therefore, this relationship is examined by this study based on the above hypothesis.

H4: There is a negative relationship between leverage and profitability of insurance companies in UAE.

Cole (2008) tests the Pecking-Order Theory and the Trade-Off Theory on small private firms' data provided by the Surveys of Small Business Finance (SSBF). He finds that firm leverage is negatively related to firm size, age and profitability. This relationship is examined by this study based on the above hypothesis.

H5: There is a negative relationship between the loss ratio and profitability of insurance companies in UAE.

According to Angoff, Brown and street (2007) a key metric insurers use to evaluate Michigan Auto Insurance companies performance is the loss ratio, , which is the ratio of incurred losses to earned premium. All other things equal, the lower the loss ratio the more profitable the business. Therefore, this relationship is examined by this study based on the above hypothesis.

Figure 3.1

Model of study

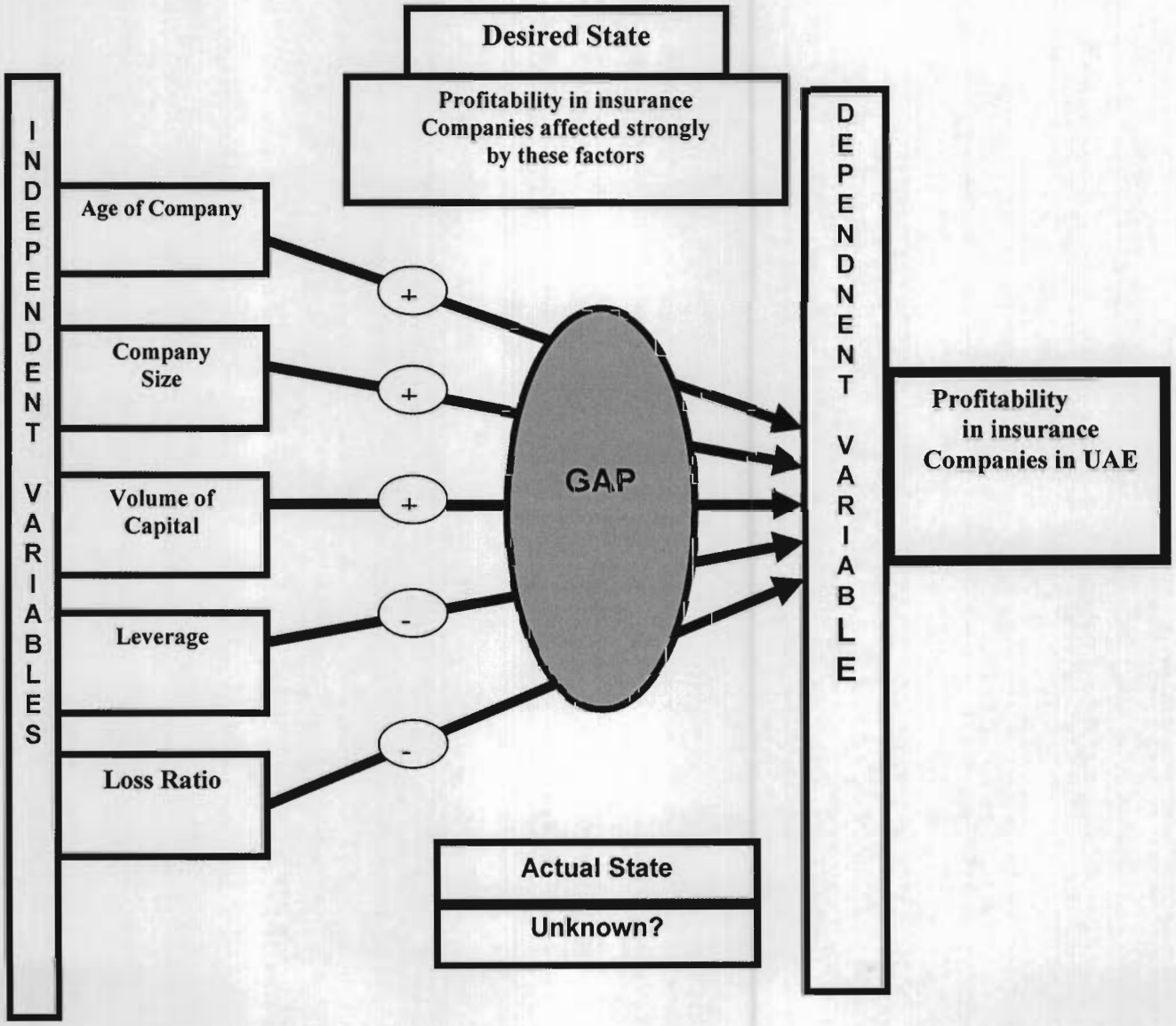


Table 3.1

Expected Relation between Profitability in Insurance Companies and Determinants

Determinants	Expected relation
Age of company	+
Company Size	+
Volume of Capital	+
Leverage ratio	-
Loss ratio	-

3.2 Data Collection

This research will use secondary data obtained from the annual reports of UAE insurance companies.

3.3 Sample Selection

The sample for this thesis is all UAE insurance companies which are listed on Dubai and Abu Dhabi SME, Excluded three companies listed on the market in 2008 which are , Takaful House,Takaful Emarat and Takaful Methaq ,the sample

in this study includes twenty four insurance companies and covers the period 2004-2007 as shown in Table 3.2.

Table 3.2
Insurance Companies listed in Dubai Financial Market & Abu Dhabi Securities Exchange

	Dubai Financial Market	Date of establishment
1	(ALLIANCE)Alliance insurance	01/07/1975
2	(AMAN)Dubai Islamic Insurance	15/03/2003
3	(AOIC)Arab Orient Insurance Company	22/07/1980
4	(ARIG)Arab Insurance Group	19/04/1980
5	(ASCANA)A.Scandinavian Insurance	01/01/1978
6	(ASNIC)Al SAGR Insurance Company	25/12/1979
7	(DARTAKAFUL)Takaful House	01/07/2008
8	(DIN)Dubai Insurance	10/07/1970
9	(DNIR)Dubai National Insurance & Re-insurance	06/01/1992
10	(IAIC)Islamic Arab Insurance	13/08/1979
11	(NGI)National General Insurance	19/11/1980
12	(OIC)Oman Insurance Company	01/11/1975
13	(TAKAFUL-EM)Takaful Emarat	01/05/2008
	Abu Dhabi Securities Exchange	
14	(DHAFRA)Al Dhafra Insurance Company	01/01/1979
15	(ADNIC) Abu Dhabi National Insurance Co	01/01/1972
16	(TKFL)Takaful Abu Dhabi	31/052003
17	(ALAIN) Al Ain Al Ahlia Insurance Co.	01/01/1975
18	(ABNIC) Al Buhaira national Insurance Company	16/05/1978
19	(AKIC) Al Khazna Insurance Co	01/01/1996
20	(AWNIC) Al Wathba Insurance Co. P.S.C	01/01/1996
21	(EIC)Emarat Insurance Company	27/07/1982
22	(RAKNIC) Ras al-Khaimah National Insurance Co	22/11/1974
23	(SICO) Sharjah Insurance Company	03/08/1970
24	(UNION)Union Insurance Company	21/03/1998
25	(UICO)United Insurance Company	01/01/1978
26	(AFNIC) Fujairah National Insurance Co.	24/10/1976
27	(METHAQ) Takaful Methaq	11/05/2008

3.4 Data Analysis

3.4.1 The Descriptive Statistics

This descriptive study produced the mean, minimum, maximum and standard deviation for each variable for UAE insurance companies during 2004-2007.

3.4.2 The Correlation of Variables

This study shows how one variable is related to another. The result of this analysis represent the nature, direction and significant of the correlation of the variables used in this study.

The correlation between variables is analyzed by using the person correlation.

3.4.3 Multiple Regressions

The multiple regression method is used to examine the relationship between the profitability in UAE insurance companies and age of company, Volume of Capital, company size, leverage ratio and loss ratio.

The result of regression analysis is an equation that represents the best prediction of a dependent variable from several independent variables.

This method is used when independent variables are correlated with one another and with the dependent variable.

The following regression equation is estimated as follow:

$$\Pi i,t=\alpha+\beta 1Agei + \beta 2\ sizei,t + \beta 3\ Voci,t + \beta 4Levi,t+ \beta 5Losi,t+ei,t$$

Where:

Π: profitability in insurance companies (dependent variable)

α: constant

Age: age of the company

Size: company size

Voc: volume of capital

Lev: leverage ratio

Los: loss ratio

e: error term

i: firms 1 to 24

t: years from 2004-2007

In this model, all independent variables enter the regression equation at once to examine the relation between the whole set of predictors and the dependent variable.

The aim of this analysis is to determine which independent variables are highly significant to determine the company's profitability.

3.5 Measurement of Variables

This study examined profitability in UAE insurance companies and five independent variables which are age of company, Volume of Capital, company size, leverage ratio and loss ratio. Theses variables have been measured as follows:

3.5.1 Profitability

There are many different ways to measure profitability, as shown in previous studies.

In this study net income to total assets (ROA) will be used to measure profitability, because most of studies used this ratio to determine the profitability in insurance companies.

3.5.2 Age of Company

This variable is measured by the number of years from the date of establishment until 2004, 2005, 2006 and2007.

3.5.3 Volume of Capital

From the previous studies we found that the volume of capital, measured as the book value of equity, so in this study also we will use the book value equity as a measurement of capital.

Total Equity capital = book value of equity will be measured by the natural log of book value of equity.

3.5.4 Company Size

Company size is measured by total Assets in log value.

3.5.5 Leverage

The amount of debt used to finance a company's assets. A company with significantly more debt than equity is considered to be highly leveraged.
This variable is proxied by the ratio of total debt to the equity value of the company.

3.5.6 Loss Ratio

There are a number of different loss ratios that can be produced. For example, the annual loss ratio from the blank is the incurred claims divided by the earned premium for the calendar year.

The National Association of Insurance Commissioners' (NAIC's) annual statement blank defines loss ratio as "a measure of the relationship between A & H (accident and health) claims and premiums."

According to investopidea.com loss ratio is a ratio of the annual claims paid by an insurance company to the premiums received.

Based on the foregoing, this variable will be proxied by the ratio of incurred claims to the earned premiums.

CHAPTER FOUR

ANALYSIS AND FINDINGS

4.0 Introduction

This chapter will investigate the relationship between profitability as dependent variable and age of company, size, volume of capital, leverage and loss ratio as independent variables.

This chapter provides the results from the analysis of data and its interpretation. Section 4.1discusses the analysis throughout, test the normality of data in section 4.1.1. Section 4.1.2 presents descriptive statistics; section 4.1.3 presents correlation between dependent variable and independent variables, followed by section 4.1.4 that shows testing the hypotheses, while section 4.1.5 illustrates the collinearity statistics, Subsequently section 4.1.6 lays down the result of regression analysis. Eventually section 4.2 presents the summary of chapter.

4.1 Analysis

4.1.1 Normality of Data

Before running the multiple regression analysis, it should be noted that there are four classic assumptions in undertaking any multiple regression analysis. One of them normality of data (Gujarati, 1995).

From Figure 4.1 it can be seen that the distribution is a normal curve, indicating that the data conforms to the normality assumption. In addition, the normal probability plots were used to test the normality of data as shown in Figure 4.2).

Figure 4.1

Histogram

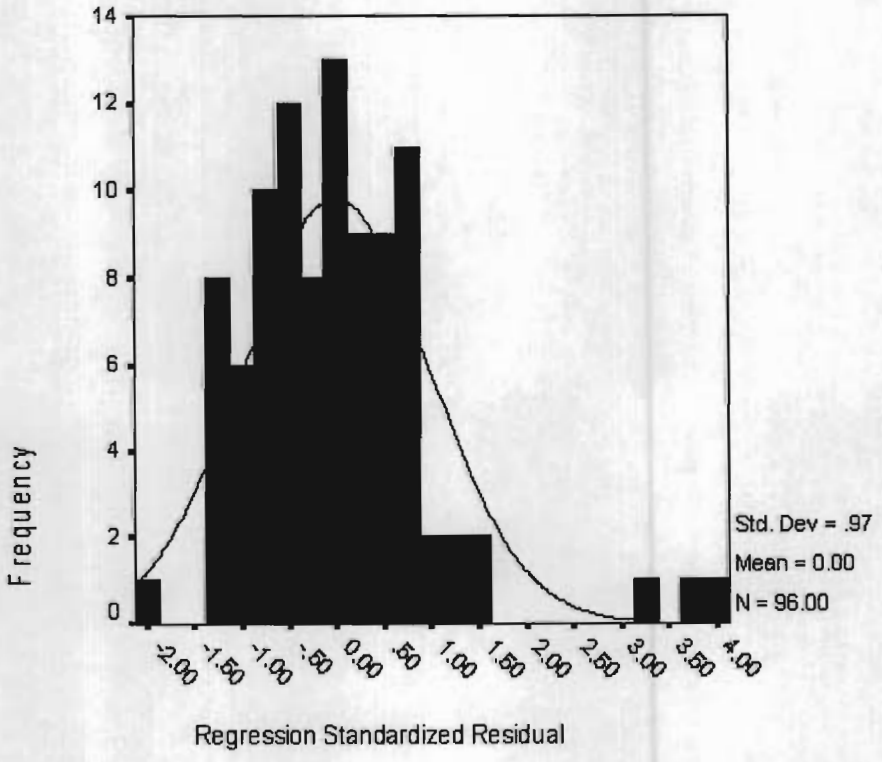
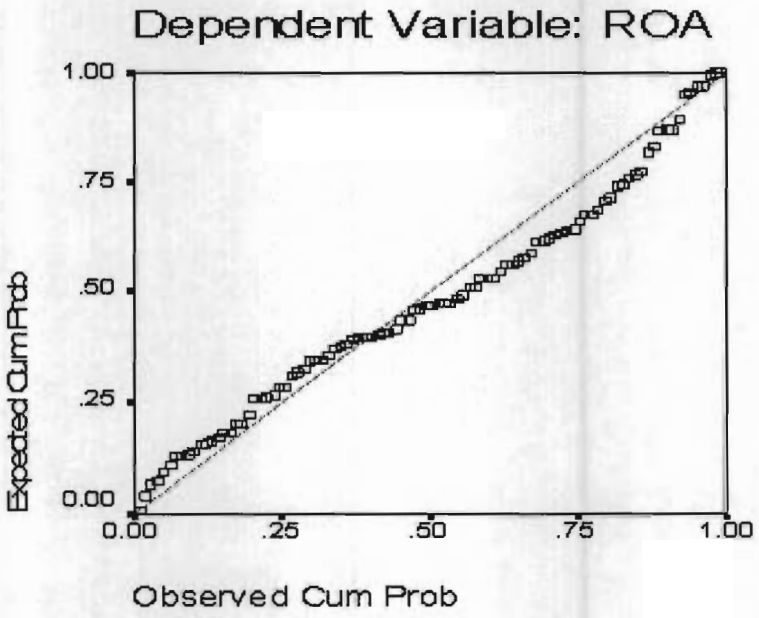


Figure 4.2

Normal P-P Plot of regression standardized residual



4.1.2 Descriptive Statistics

Univariate analysis of all the variables in this study are presented in Table 4.1

Table 4.1

Descriptive Statistics

	Mean	Std. Deviation	N
ROA	.133250	.1113130	96
AGE	23.46	9.966	96
SIZE	19.448128	1.3511106	96
VOC	18.873640	1.2569065	96
LEV	.488496	.2033522	96
LOSS	.552284	.2538218	96

Based on Table 4.1, the mean value of profitability (ROA) is 0.133, and the value of the standard deviation is 0.111.

The mean value of age is 23.46 years; and there are big differences between values of age because the standard deviation is high at 9.966 years.

The mean value of size is 19.45. The size is not variation across the sample firms with a standard deviation is 1.35.

The mean value of volume of capital was 18.87, and there were moderate differences between the values of volume of capital because the standard deviation is 1.02.

The mean value of leverage was 0.49 which indicates that leverage was high band there were big differences between the values of leverage across the sample firms because the standard deviation was high 0.20.

Finally, the mean value of loss ratio was 0.55, and standard deviation is 0.25.

The second step is an analysis of bivariate relationships between variables. This can be done using a correlation matrix, generated by using SPSS.

4.1.3 Correlation

Table 4.2: Shows the correlations between profitability and independent variables

Table 4.2

Correlations

		ROA	AGE	SIZE	VOC	LEV	LOSS
ROA	Pearson Correlation	1	-.035	.878(**)	.887(**)	-.571(**)	-.592(**)
	Sig. (2-tailed)	.	.734	.000	.000	.000	.000
	N	96	96	96	96	96	96
AGE	Pearson Correlation	-.035	1	-.003	.002	.071	.008
	Sig. (2-tailed)	.734	.	.974	.987	.489	.940
	N	96	96	96	96	96	96
SIZE	Pearson Correlation	.878(**)	-.003	1	.962(**)	-.479(**)	-.597(**)
	Sig. (2-tailed)	.000	.974	.	.000	.000	.000
	N	96	96	96	96	96	96
VOC	Pearson Correlation	.887(**)	.002	.962(**)	1	-.495(**)	-.588(**)
	Sig. (2-tailed)	.000	.987	.000	.	.000	.000
	N	96	96	96	96	96	96
LEV	Pearson Correlation	-.571(**)	.071	-.479(**)	-.495(**)	1	.289(**)
	Sig. (2-tailed)	.000	.489	.000	.000	.	.004
	N	96	96	96	96	96	96
LOSS	Pearson Correlation	-.592(**)	.008	-.597(**)	-.588(**)	.289(**)	1
	Sig. (2-tailed)	.000	.940	.000	.000	.004	.
	N	96	96	96	96	96	96

** Correlation is significant at the 0.01 level (2-tailed).

Correlation analysis shows that ROA is significant with size, Voc, Lev and loss ratio. The analysis also shows that several IVs are significantly correlated with each other, for example size is correlated with Voc, Lev and loss. This observation indicates that special attention should be given to possible multicollinearity problem when regression analysis is executed.

Testing the Hypotheses

Hypothesis 1

Table 4.3: Correlations between age and ROA

	Pearson Correlation (r)	Significant
AGE	-.035	.734

From Table 4.3 we found that there is no significant relationship between age and ROA . So H1 is accepted.

Hypothesis 2

Table 4.4

Correlations between size and ROA

	Pearson Correlation (r)	Significant
SIZE	.878	.000

The results from Table 4.4 show that there is a significant strong positive correlation between size and ROA with a significant value of 0.000. Hence H2 is accepted.

Hypothesis 3

Table 4.5

Correlations between voc and ROA

	Pearson Correlation (r)	Significant
VOC	.887	.000

The results from Table 4.5 show that there is a significant strong positive correlation between voc and ROA with a significant value of 0.000. Hence H3 is accepted.

Hypothesis 4

Table 4.6

Correlations between lev and ROA

	Pearson Correlation (r)	Significant
LEV	-.571	.000

The results from Table 4.6 show that there is a significant and negative correlation between Lev and ROA with a significant value of 0.000. Hence H4 is accepted.

Hypothesis 5

Table 4.7

Correlations between loss and ROA

	Pearson Correlation (r)	Significant
LOSS	-.592	.000

The results from Table 4.7 show that there is a significant and negative correlation between loss and ROA with a significant value of 0.000. Hence H5 is accepted.

4.1.4 Collinearity Statistics

In this part, the difficulty with multi-collinearity is discussed based on the results that have been produced. Multi-collinearity is investigated using tolerance value and VIF value. An insignificant tolerance value indicates that the variable under consideration is almost a perfect linear combination of the independent variables already in the equation and that it should not be added to the regression equation. Tolerance has a rang from zero to one. The closer tolerance value to zero relates a level of multi collinearity.

Table 4.8

Collinearity (Model 1)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-1.040	.115		-9.047	.000		
	AGE	.000	.000	-.022	-.496	.621	.993	1.007
	SIZE	.023	.013	.275	1.688	.095	.073	13.616
	VOC	.043	.014	.483	2.953	.004	.073	13.660
	LEV	-.094	.028	-.171	-3.348	.001	.750	1.334
	LOSS	-.041	.024	-.094	-1.704	.092	.641	1.560

a Dependent Variable: ROA

From Table 4.8, for the first model the results show that VIF value for size is 13.616 and 13.660 for volume of capital, which are more than 10. It indicates that this model is not free from multicollinearity. So there is problem of multicollinearity between the five independent variables in this model.

Table 4.9

Collinearity (Model 2)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
2	(Constant)	-1.024	.116		-8.847	.000		
	AGE	.000	.001	-.023	-.517	.606	.993	1.007
	VOC	.065	.005	.739	12.139	.000	.538	1.858
	LEV	-.094	.028	-.172	-3.337	.001	.750	1.334
	LOSS	-.047	.024	-.108	-1.948	.050	.654	1.528

a Dependent Variable: ROA

From Table 4.9, for the second model excluding size variable, the results show that VIF value for all variables less than 10. It indicates that this model is free from multicollinearity. So there is not problem of multicollinearity between the four independent variables in this model.

Table 4.10

Collinearity (Model 3)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
3	(Constant)	-.944	.115		-8.220	.000		
	AGE	.000	.001	-.018	-.391	.697	.994	1.006
	SIZE	.060	.005	.723	11.540	.000	.540	1.852
	LEV	-.105	.029	-.193	-3.658	.000	.765	1.307
	LOSS	-.046	.025	-.104	-1.812	.073	.643	1.555

a Dependent Variable: ROA

From Table 4.10, for the third model excluding Voc variable, the results show that VIF value for all variables less than 10. It indicates that this model is free from multicollinearity. So there is not problem of multicollinearity between the four independent variables in this model.

4.1.5 Regression Equation

Table 4.11
Multiple Regression analysis- Model (2)

Model Summary (b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.905(a)	.818	.810	.0484565

a Predictors: (Constant), LOSS, AGE, LEV, VOC
b Dependent Variable: ROA

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	.963	4	.241	102.579	.000(a)
	Residual	.214	91	.002		
	Total	1.177	95			

a Predictors: (Constant), LOSS, AGE, LEV, VOC
b Dependent Variable: ROA

The result of regression four independent variables on ROA in model 2 are presented in Table 4.11. The first Table "model summary " shows the four independent variables entered into the regression model. When all the inter-

correlation among the four independent variables are taken into account, the R square is 0.818, this means that 81.8% of the variance of ROA is explained by four independent variables. However t test shows that one of the independent variables which is age, is not significant (p= .606).

This result is consistent with the correlation analysis.

The ANOVA Table shows that the F value is significant at p=.000 when four variables are entered together

Table 4.12
Multiple regression analysis- Model (3)

Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
3	.898(a)	.807	.799	.0499659

a Predictors: (Constant), SIZE, AGE, LEV, LOSS
b Dependent Variable: ROA

ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	.950	4	.237	95.121	.000(a)
	Residual	.227	91	.002		
	Total	1.177	95			

a Predictors: (Constant), SIZE, AGE, LEV, LOSS
b Dependent Variable: ROA

The result of regression four independent variables on ROA in model 3 are presented in Table 4.12. The first Table "model summary " shows the four independent variables entered into the regression model. When all the inter-correlation among the four independent variables are taken into account, the R square is 0.807, this means that 80.7% of the variance is explained on ROA from the four independent variables.

The ANOVA Table shows that the F value is significant at p=.000 when four variables are entered together.

The last two models explain the relationship between the independent variables and the dependent variable, moreover these models are significant and both of them use four independent variables as predictors to the ROA.

The main goal of observing the adjusted value of R square is to apprehend the best model that can explain ROA in insurance companies in UAE. It is noted that the adjusted R square in the second and third models are 0.81 and 0.799 respectively. This indicates that the second model is the best model to explain ROA in insurance companies in UAE. So the function for regression equation for second model is:

$$\Pi i,t=-1.024 + 0.065\ Voci,t - 0.094 Levi,t - 0.047 Losi,t + ei,t$$

The regression analysis implies that:

- Regression coefficient of Voc at 0.065 indicates that when Voc increases by 1% the ROA will increase by 6.5%.
- Regression coefficient of Lev at -0.094 indicates that when Lev increases by 1% the ROA will decrease by 9.4%.
- Regression coefficient of loss at -0.047 indicates that when Loss increases by 1% the ROA will decrease by 4.7%.

4.2 Summary of the Chapter

This chapter presents the result of the hypotheses of five independent variables tested on the dependent variable (ROA). The equation applied in this study are examined against multicollinearity

Empirical results provide detailed discussion on sample descriptive statistics and mean comparison between ROA and independent variables (age, size, volume of capital, leverage and loss ratio). It followed by Pearson Correlation analysis to determine the relationship between dependent variable towards independent variables. Multiple regression analysis also used in this study to describe the profitability among UAE insurance companies.

From this chapter it can be concluded that ROA is affected positively by size volume of capital, and negatively by leverage and loss ratio.

CHAPTER FIVE

CONCLUSION

5.0 Introduction

The objective of this study is to examine the determinants of UAE insurance company's profitability proxied by ROA. This study used secondary data during the period 2004-2007 and the sample of 24 insurance companies that are listed on UAE stock market. The variables tested in this study are age of company, company size, volume of capital, leverage ratio and loss ratio.

Descriptive statistics and multiple regression analysis were performed to describe the profitability among UAE insurance companies.

This chapter presents a conclusion of the study by summarizing the study's findings and discussing its limitations, and providing suggestions for future research.

5.1.1 Summary of Findings

The findings of this study contribute towards a better understanding of financing performance in UAE insurance companies. ROA and five variables that represent age, size, volume of capital, leverage and loss ratio, were developed to test which factors best explained UAE insurance companies' profitability.

The results show that there is no relationship between profitability and age of company, and, there is significantly positive association between size and profitability. Also, the result shows that the volume of capital variable was a positive related to the profitability, this relation also is significant. As a conclusion, the results generally do not support first hypothesis, and support second and third hypothesizes.

On the other hand, the analysis suggests that a reverse and significant relationship between leverage ratio and loss ratio as independent variables and profitability, so this result supports the last two hypothesizes. (see Table 4.6)

5.2 Limitations of Study

There are several limitations in this study. First, this study focused on the determinants of the profitability in insurance companies in UAE. Specifically, the study examines the effects of the independent variables (age of company, company size, volume of capital, leverage ratio and loss ratio) on profitability. These factors do not reflect all the determinants of profitability because, they only represent internal factors

Secondly,the result are based on limited amount of data because the data for UAE insurance companies available are only for four years (2004-2007) .

Finaly , the study is constrained by the limited time and limited financial resource.

5.3 Recommendation for further Research

Further studies on profitability in insurance companies should add more variables such as macroeconomic variables. Other recommendation is that the future researchers should use a longer period of observation and the data should be derived from listed and non-listed insurance companies.

This study has basically focused on the domestic insurance companies so it is important for future research to extend also the analysis to include the subsidiaries of foreign insurance companies in UAE.

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